# Customer Care Solutions
# DTX-3 Series Transceivers

# General Information

Issue 1 4/03
©Nokia Mobile Phones Ltd.

Table of Contents

**Page No**

Introduction to DTX-3 (Nokia 32) ..... 3
Product Concept Generally ..... 3
Concept ..... 3
Nokia 32 Sales package contents ..... 5
Technical Specifications ..... 6
Mechanical Characteristics ..... 6
Environmental Conditions ..... 6


©Nokia Mobile Phones Ltd.

# Introduction to DTX-3 (Nokia 32)

Nokia 32 PBX Connectivity Terminal includes two modules:

1. Nokia TME-3 or Nokia TME-4 GSM transceiver

2. Nokia DTX-3 application module.

The Nokia TME-3 is a Class 4/5 (EGSM900) and Class 1/2 (EGSM1800) dual band GSM terminal. The Nokia TME-4 is a GSM850/1900 dual band terminal.

The DTX-3 provides an analogue two-wire connection for a landline telephone set or PBX (Private Branch eXchange) trunk or extension connection.

The main purpose of the Nokia 32 is to provide direct GSM connection for companies using fixed line PBX.

Calls targeted to the GSM network can be diverted via Nokia 32. Thus the company gets a direct connection to a GSM network from the internal fixed line telephones without the costly interconnection fee between fixed and GSM networks.

## Product Concept Generally

Nokia 32 PBX connectivity terminal is a GSM device for PBX (Private Branch Exchange) connections. Nokia 32 has interfaces for PBX trunk and extension connections and the trunk connection can be also used for normal landline telephone connection substituting fixed telephone line. The terminal also supports data connections with CSD, HSCSD and GPRS.

The telephone line connections for Nokia 32 are provided with standard two-wire connection through RJ-11 connectors. Each connection method, trunk and extension, have their own dedicated RJ-11 ports. The data connection is provided via RS-232 connection over a D9 female connector. In addition, Nokia 32 has interfaces for power supply and external antenna adapter. Nokia 32 internal antenna is used when there is no need for an external antenna.

The main purpose of Nokia 32 is to use it as a GSM router beside a company PBX. Company calls to GSM numbers are routed via Nokia 32 in order to gain cost savings in GSM-to-GSM calls and the fixed telephone line is bypassed. Nokia 32 also gives the opportunity to use GSM network features in landline environment.

## Concept

(For list of abbreviations kindly refer to the manual section Modules.)

1. The Nokia 32 is connected to an analogue trunk interface of a PBX.

2. The Nokia 32 is connected to an analogue extension interface of a PBX.

The Nokia 32 is attached either to an analogue trunk (fig. 1) or an analogue extension


©Nokia Mobile Phones Ltd.

(fig. 2) line of the PBX.

**Figure 1: Nokia 32 connected to a Trunk Interface of a PBX**

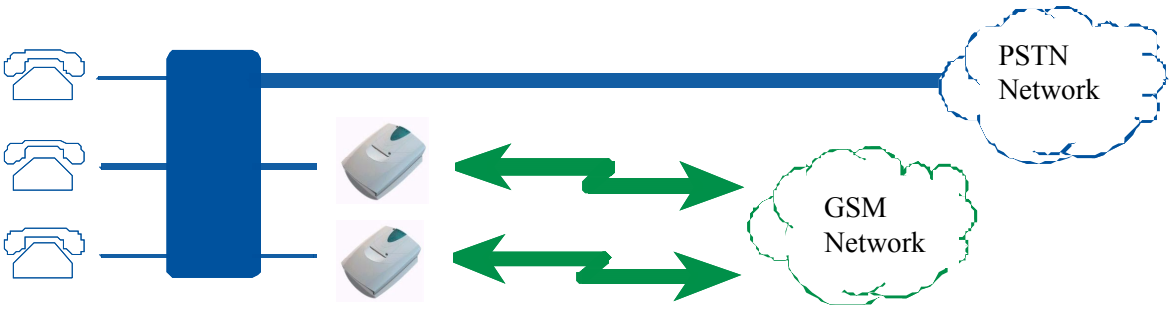
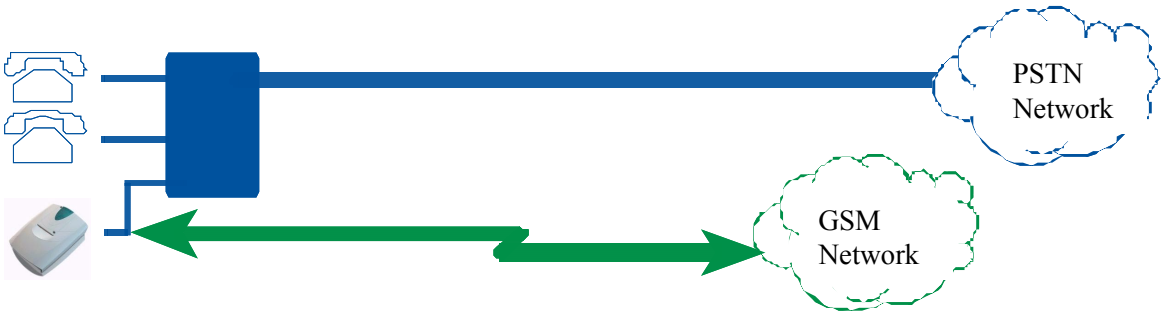



**Figure 2: Nokia 32 connected to an analog extension interface of a PBX**

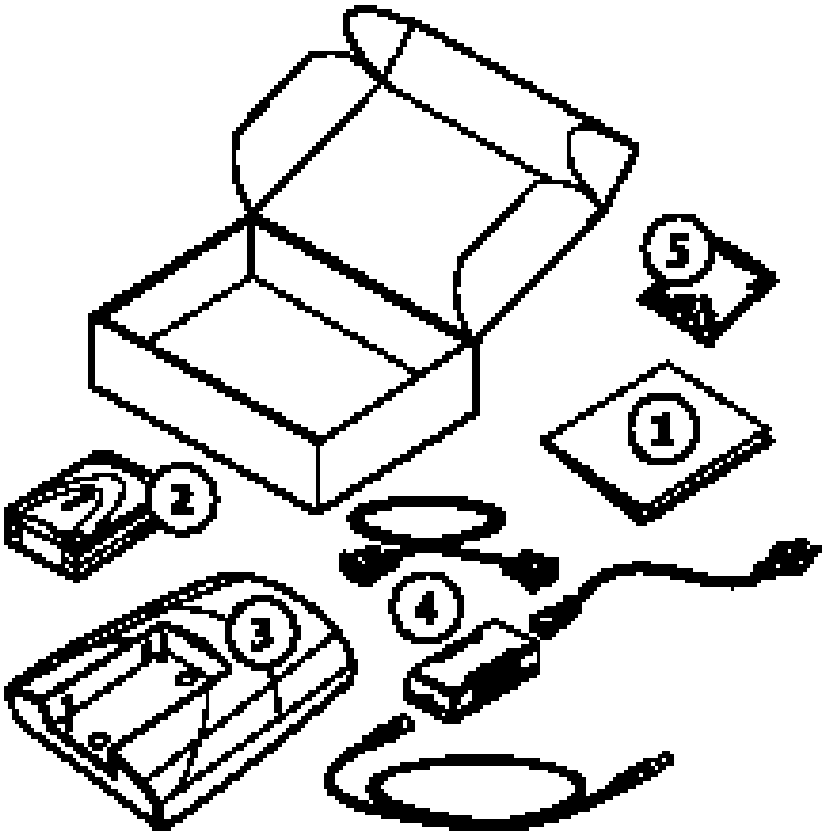



After the Nokia 32 has been connected to a PBX, the PBX may require reconfiguration to route mobile targeted calls via the Nokia 32. This reconfiguration requires special know-how about the PBX. In order to perform successful installation, further information must be asked from the PBX supplier. In no conditions it is recommended to do the installation without adequate know-how and tools.

When Nokia 32 is connected to the extension side of the PBX, the originator of call affects to the routing by calling to the extension where Nokia 32 is connected and then keys in the targeted mobile number.


©Nokia Mobile Phones Ltd.

## Nokia 32 Sales package contents




:

**Table 1: Nokia 32 sales package contents**

| Item | Name | Type code | Material code |
|---|---|---|---|
| 1 | User's Guide | | |
| 2 | Connectivity Terminal | TME-3<br>TME-4 | 0600344<br>0600342 |
| 3 | Application Module | DTX-3 | 0630596 |
| 4 | Power Supply | ACW-5B | 0630526 |
| 4 | Power Cord alternatives | Euro: PCW-5<br>UK: PCW-5X<br>US: PCW-5U | 0730248<br>0730247<br>0730246 |
| 4 | DC Cable | AKD-2A | 0730248 |
| 5 | Installation Kit | | 0262959 |


©Nokia Mobile Phones Ltd.

# Technical Specifications

## Mechanical Characteristics

| Unit | Dimensions (mm) | Weight (g) | Notes |
|---|---|---|---|
| TME-3 terminal | 84 x 53 x 26 | 65 | Without power supply |
| DTX-3 Application Module | 121 x 158 x 45 | 174 | Without power supply |

### Technical specifications

Data Standard RS-232.

All applicable ITU-T V.25ter, ETSI GSM 07.07 and ETSI GSM 07.05 commands are supported.

HSCSD max 43.2kbits/s (Depending on operator services).

GPRS multi-slot class 6 (3+1, 2+2, 2+1).

### User Interface Features

User Interface consist of three two-colour light indicators that show the state/mode of the TME-3 or TME-4 and DTX-3. Some user interface functionality is contained in the software application running in the host computer.

## Environmental Conditions

| Parameter | Ambient temperature (degrees Celsius) | Ambient humidity (relative) |
|---|---|---|
| Max operation | -10 to +55 | 20 to 75% |
| Storage | -40 to +85 | 5 to 95%, non condensing |

TME-3/TME-4 is not protected against ingress of water. DTX-3 may be instantaneously subjected to dripped or condensed water. Longer term contact with water will cause permanent damage.

TME-3/TME-4 and DTX-3 do not break mechanically after a free fall from 100cm (about 40 inches) height to a concrete floor.


©Nokia Mobile Phones Ltd.